From: Neils, David

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Cc: Ted Diers; Gregg Comstock; "Fred William Quimby"
Subject: 5/30 Merrymeeting goal setting meeting summary

**Date:** Monday, June 03, 2019 9:36:28 AM

All,

I attended goal setting meeting for the Merrymeeting Watershed Plan on Thursday, 5/30. At the meeting FB Environmental and DK Water Resources staff presented an overview of the watershed model they developed for Merrymeeting Lake, Marsh Pond, Jones Pond, Downing Pond, and the section of the Merrymeeting River that stretches from the outflow of Downing Pond to Alton Bay (MMR). The model indicates that the hatchery is the largest current contributor to the TP load for Marsh, Jones, and Downing Pond (57-67%). In the downstream reach of MMR, ~28% of the TP load comes from the hatchery.

After reviewing the model outputs, the committee discussed various "targets" of TP concentrations that would be acceptable in the downstream ponds. It was unanimous that the target acceptable trophic condition for these ponds should be mesotrophic. As you are aware, DES uses a threshold of 12ug/L as the summer median for mesotrophic lakes and ponds. Adding a 10% margin of safety, puts the target at 10.8ug/L. After some discussion, the group agreed that a target of 10ug/L as the maximum monthly average was appropriate to reduce the likelihood of cyanobacteria blooms, for ease of communication, and given the potential for future development.

-d.

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